06/02/2008

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NOTICE OF ALLOWANCE AND FEE(S) DUE

26652 7590 AT&T CORP. ROOM 2A207

EXAMINER BATURAY, ALICIA PAPER NUMBER

2146

ARTHNIT ONE AT&T WAY BEDMINSTER, NJ 07921 DATE MAILED: 06/02/2008

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 10/042 142 01/11/2002 03493.00296 5828

TITLE OF INVENTION: ENHANCED CHANNEL ACCESS MECHANISMS FOR AN HPNA NETWORK

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$0 | \$0 | \$1440 | 09/02/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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| BEDMINSTER, | NJ 07921 | | | | | | (Depositor's name) |
| | | | L | | | | (Signature) |
| | | | L | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO |)R | ATTC | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/042,142 | 01/11/2002 | | Wei Lin | 03493.00296 | | 03493.00296 | 5828 |
| | | EL ACCESS MECHAN | | | | Γ | 1 |
| APPLN, TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUI | | E FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$1440 | \$0 | \$0 | | \$1440 | 09/02/2008 |
| EXAM | | ART UNIT | CLASS-SUBCLASS | J |] | | |
| BATURA | | 2146 | 370-443000 | | | | |
| 1. Change of correspondence address or indication of 'Fee Address' (37 CFR 1.56). Change of correspondence address (or Change of Correspondence Address form PTOSB/1/22) nutached. J. Fee Address' Indication for 'Fee Address' Indication form PTOSB/47 (xev 03-02) or more recent) attached. Use of a Custome Number is required. | | | or agents OR, alterna (2) the name of a sin registered attorney o 2 registered patent at listed, no name will b | f a single firm (having as a member a ricey or agent) and the names of up to the that attorneys or agents. If no name is will be printed. | | | |
| (A) NAME OF ASSI | less an assignee is ident h in 37 CFR 3.11. Comp GNEE | ified below, no assignee detion of this form is NO | data will appear on the T a substitute for filing a (B) RESIDENCE: (CIT | patent. If an assign n assignment. 'Y and STATE OR | COUN | TRY) | ocument has been filed for |
| 4a. The following fee(s) | are submitted: | 4 | b. Payment of Fee(s): (Pl A check is enclosed Payment by credit c The Director is here overpayment, to De | ease first reapply a | ny pre | viously paid issue fee sached. | shown above) |
| | s SMALL ENTITY state | is. See 37 CFR 1.27. | ☐ b. Applicant is no le | | | | |
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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|----------------|----------------------|--------------------------------|------------------|
| 10/042,142 | 01/11/2002 | Wei Lin | 03493.00296 | 5828 |
| 26652 7 | 590 06/02/2008 | | EXAM | UNER |
| AT&T CORP. | | | BATURA | Y, ALICIA |
| ROOM 2A207 | | | ART UNIT | PAPER NUMBER |
| ONE AT&T WAY BEDMINSTER, NJ 07921 | | | 2146 DATE MAILED: 06/02/200 | 8 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1202 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1202 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | Applicant(s) | | |
|-----------------|--------------|--------------|--|--|
| 10/042,142 | LIN ET AL. | | | |
| Examiner | Art Unit | | | |
| Aliaia Baturay | 2146 | | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- 1. This communication is responsive to the request to lift suspension filed 06 February 2008.
- The allowed claim(s) is/are 1-61 and 80-91 renumbered as 1-73.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Inhereto or 2) In to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 12/21/2007
- ☐ Examiner's Comment Regarding Requirement for Deposit. of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

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Allowance

Claims 62-79 are withdrawn.

Claims 1-61 and 80-91 are allowed.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than

the payment of the issue fee.

4. Authorization for this examiner's amendment was given in a telephone interview with

Michael Haynes (Reg. #40,014) on 29 May 2008.

5. The application has been amended as follows:

In the Claims: Claims 1, 18, 32, 49 and 80 have been amended.

Claim 1 (Currently Amended)

Line 9 "an HPNA 2.0 frame" has been replaced with -an HPNA v2 frame-.

Line 10 "the Backoff Signal Slot 0 one of' has been replaced with -the Backoff Signal

Slot 0 is one of-.

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Claim 18 (Currently Amended)

Line 11 "HPNA 2.0 frame" has been replaced with -HPNA v2 frame-.

Line 12 "0 one of" has been replaced with -0 is one of-.

Claim 32 (Currently Amended)

Line 2 "a communications medium" has been replaced with -a telephone-wire-based communications medium-.

Line 5 "a Media Control Station (MC STA) maintaining" has been replaced with -a

Media Control Station (MC STA) device maintaining-.

Line 8 "an HPNA 2.0 frame" has been replaced with -an HPNA v2 frame-.

Line 9 "the Backoff Signal Slot 0 one of' has been replaced with -the Backoff Signal Slot 0 is one of-.

Claim 49 (Currently Amended)

Line 2 "a communications medium" has been replaced with -a telephone-wire-based communications medium-.

Line 5 "a Media Control Station (MC STA) maintaining" has been replaced with -a

Media Control Station (MC STA) device maintaining-.

Line 13 "an HPNA 2.0 frame" has been replaced with -an HPNA v2 frame-.

Line 14 "the Backoff Signal Slot 0 one of' has been replaced with -the Backoff Signal Slot 0 is one of-.

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Claim 80 (Currently Amended)

Line 11 "an HPNA 2.0" has been replaced with -an HPNA v2-.

Line 12 "the Backoff Signal Slot 0 one of' has been replaced with -the Backoff Signal

Slot 0 is one of-.

In the Specification: pages 1, 9 and 10 have been amended.

Page 1, paragraph 01

This application claims priority to provisional U.S. Application Ser. No. 60/269,354,

entitled "Enhanced Channel Access Mechanisms For A QoS-Driven HPNA Network,"

invented by Wei Lin and Matthew Sherman, filed February 20, 2001, and provisional

U.S. Application Ser. No. 60/269,861, entitled HPNA 3.0 channel access mechanism for

compatibility with HPNA 2, invented by Matthew J. Sherman, filed February 21,2001,

both of which are incorporated by reference herein. The present application is also related

to U.S. Patent Application Serial No. (Atty Docket No. IDS 2000 0672B, 3493.00297)

10/042,165, now U.S. Patent No. 7,298,757, U.S. Patent Application Serial No. (Atty

Docket No. IDS 2000-0672C, 3493.00298) 10/042,179, now U.S. Patent No. 7,293,103,

U.S. Patent Application Serial No. (Atty Docket No. IDS 2000-0672E, 3493.00326)

10/042,166, now U.S. Patent No. 7,310,326, and pending U.S. Patent Application Serial

No. (Atty Docket No. 1DS 2000-0672A, 3493.00337) 10/042,143, each entitled

"Enhanced Channel Access Mechanism For QoS-Driven HomePNA (HPNA 2.1), each

filed on December 19, 2001, and each incorporated by reference herein.

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Page 9-10, paragraph 26

The medium access techniques of the present invention maybe used by an enhanced STA separately or in combination for gaining preferential access to the HN communications medium. Additionally, the preferential medium access techniques of the present invention can be used in conjunction with the centralized medium access techniques disclosed by U.S. Patent Application Serial No. 09/616,900, now U.S. Patent No. 6,862,270, entitled "An Architectural Reference Model For OoS-Driven Wireless Lans LANs," invented by J.-M. Ho; to U.S. Patent Application Serial No. 09/616,901, now U.S. Patent No. 6.804.222, entitled "An In-Band OoS Signaling Reference Model for OoS-Driven Wireless LANs," invented by W. Lin and J.-M. Ho; to U.S. Patent Application Serial No. 09/617,083, now U.S. Patent No. 7,151,762, entitled "Virtual Streams for OoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/616,897, now U.S. Patent No. 6,970,422, entitled "Admission Control for OoS-Driven Wireless LANs," invented by W. Lin and J.-M. Ho; to U.S. Patent Application Serial No. 09/616,896, entitled "Frame Classification for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/617,493, now U.S. Patent No. 6.850.981, entitled "Frame Scheduling for OoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/617,494, now U.S. Patent No. 6,999,442, entitled "RSVP/SBM Based Down-Stream Session Setup, Modification, and Teardown for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/616,878, now U.S. Patent No. 7,068,632, entitled "RSVP/SBM Based Up-Stream Session Setup, Modification, and Teardown for QoS- Art Unit: 2146

Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/617,440, now U.S. Patent No. 6,950,397, entitled "RSVP/SBM Based Side-Stream Session Setup, Modification, and Teardown for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; and to U.S. Patent Application Serial No. 09/616,885. now U.S. Patent No. 7,068,633, entitled "Enhanced Channel Access Mechanisms for OoS-Driven Wireless LANs," invented by J.-M. Ho; to U.S. Patent Application Serial No. 09/617,439, now U.S. Patent No. 7,031,287, entitled "Centralized Contention and Reservation Request for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/616,884, now U.S. Patent No. 7,039,032, entitled "Multipoll for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; each filed July 14, 2000, and each of which is incorporated by reference herein. Additionally, the present application is related to U.S. Patent Application Serial No. 09/597,392 09/596,712, now U.S. Patent No. 6,747,959, entitled "Voice-Data Integrated Multiaccess By Self-Reservation and Blocked Binary Tree Resolution," invented by J.-M. Ho and filed June 19, 2000; and U.S. Patent Application Serial No. 09/596,712 09/597,392, now U.S. Patent No. 6,963,545, entitled "Voice-Data Integrated Multiaccess By Self-Reservation and Stabilized Aloha Contention," invented by J.-M. Ho, and filed June 19, 2000, each of which is incorporated by reference herein.

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Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance: Claims 1-61 and 80-

91 are allowable over the prior art of record.

7. The examiner has found that the prior art of record does not teach, suggest, or render

obvious the specific combination of a method or a communications network comprising

providing access to a communications medium, the communications medium being suitable

for allowing use of Home Phoneline Network Association (HPNA) v2-formatted frames,

each HPNA v2-formatted frame being timed to allow a plurality of physical layer priority

level slots, comprising of: at least one enhanced STA adapted to always choose a Backoff

Signal Slot 0 of an HPNA v2 frame during contention resolution with an HPNA v2 station,

the Backoff Signal Slot 0 is one of only three Backoff Signal Slots specified under HPNA $\rm v2$

for use in contention resolution after a collision (major difference in the claims not found in

the prior art) as set forth in the specification and recited in independent claims 1, 18, 32, 49

and 80.

8. Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the

issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons

for Allowance OR Examiner's Amendment."

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Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner

can normally be reached at 7:30am - 5pm, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this

application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay

June 3, 2008

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2146